[NOx, Hg, AND SO REMOVAL USING AMMONIA]

Abstract of Disclosure

A process and apparatus for removing SO $_2$, O, and NO $_2$ from a gas stream having the steps of oxidizing a portion of the NO in the flue gas stream to NO $_2$, scrubbing the SO $_2$, NO, and NO $_2$ with an ammonia scrubbing solution, and removing any ammonia aerosols generated by the scrubbing in a wet electrostatic precipitator. The process can also remove Hg by oxidizing it to HgO and removing it in the wet electrostatic precipitator. Ammonium sulfate, a valuable fertilizer, can be withdrawn from the scrubbing solution.

Figures